

I hereby certify that this correspondence is being delivered by Hand:

Delivery to:

Assistant Commissioner for Patents
Washington, D.C. 20231

PATENT

Attorney Docket No.: 019496-005820US

Client Reference No.: S24-US3

On 3/11/02

RECEIVED

FEB 24 2004

By: TAMARA LIVENGOOD
Signature

02 MAR 11 AM 9:58

RECEIVED
MAR 10 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Edward Rebar et al.

Application No.: 09/846,033

Filed: April 30, 2001

For: REGULATION OF
ANGIOGENESIS WITH ZINC FINGER
PROTEINS

Examiner: Unassigned

Art Unit: 1646

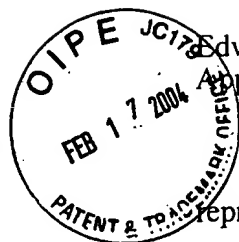
INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no



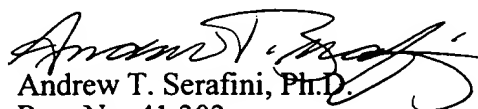
Edward Rebar et al.
Application No.: 09/846,033

PATENT

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

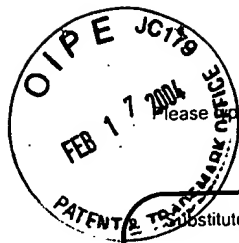

Andrew T. Serafini, Ph.D.
Reg. No. 41,303

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
ATS:bjl

PA 3202253 v1

RECEIVED

FEB 24 2004



Please place a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	AA	6,140,466		Barbas III et al.	10/31/00	
	AB	6,140,081		Barbas	10/31/00	
	AC	6,140,073		Bayne et al.	10/31/00	
	AD	6,130,071		Alitalo et al.	10/10/00	
	AE	6,040,157		Hu et al.	03/21/00	
	AF	6,013,453		Choo et al.	01/11/00	
	AG	6,007,988		Choo et al.	12/28/99	
	AH	6,007,408		Sandhu	12/28/99	
	AI	6,001,885		Vega et al.	12/14/99	
	AJ	5,994,300		Bayne et al.	11/30/99	
	AK	5,972,615		An et al.	10/26/99	
	AL	5,939,538		Leavitt et al.	08/17/99	
	AM	5,935,820		Rosen et al.	08/10/99	
	AN	5,932,540		Rosen et al.	08/03/99	
	AO	5,928,939		Eriksson et al.	07/27/99	
	AP	5,916,794		Chandrasegaran	06/29/99	
	AQ	5,871,907		Winter et al.	02/16/99	
	AR	5,871,902		Weininger et al.	02/16/99	
	AS	5,869,618		Lippman et al.	02/9/99	
	AT	5,840,693		Eriksson et al.	11/24/98	
	AU	5,792,640		Chandrasegaran	08/11/98	
	AV	5,789,538		Rebar et al.	08/04/98	
	AW	5,776,755		Alitalo et al.	07/07/98	
	AX	5,702,914		Evans et al.	12/30/97	

RECEIVED

FEB 24 2004

Examiner
Signature

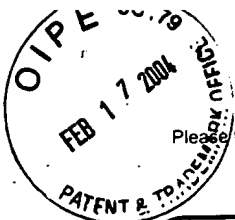
Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PA 3202253 v1



Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/846,033
		Filing Date	April 30, 2001
		First Named Inventor	Rebar, Edward, et al.
		Group Art Unit	1646
		Examiner Name	Unassigned
Sheet 2	of	Attorney Docket Number	019496-005820US

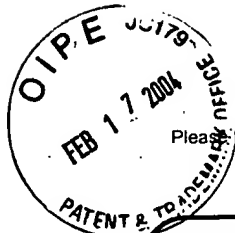
U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	AY	5,674,738		Abramson et al.	10/7/97	
	AZ	5,639,592		Evans et al.	6/17/97	
	BA	5,607,918		Eriksson et al.	03/04/97	
	BB	5,597,693		Evans et al.	01/28/97	
	BC	5,578,483		Evans et al.	11/26/96	
	BD	5,498,530		Schatz et al.	03/12/96	
	BE	5,487,994		Chandrasegaran	01/30/96	
	BF	5,436,150		Chandrasegaran	07/25/95	
	BG	5,403,484		Ladner et al.	04/4/95	
	BH	5,376,530		De The et al.	12/27/94	
	BI	5,356,802		Chandrasegaran	10/18/94	
	BJ	5,350,840		Call et al.	09/27/94	
	BK	5,348,864		Barbacid	09/20/94	
	BL	5,340,739		Stevens et al.	08/23/94	
	BM	5,332,671		Ferrara, et al.	07/26/94	
	BN	5,324,819		Oppermann et al.	06/28/94	
	BO	5,324,818		Nabel et al.	06/28/94	
	BP	5,324,638		Tao et al.	06/28/94	
	BQ	5,302,519		Blackwood et al.	04/12/94	
	BR	5,243,041		Fernandez-Pol	09/7/93	
	BS	5,240,848		Keck et al.	08/31/93	
	BT	5,223,409		Ladner et al.	06/29/93	
	BU	5,219,739		Tischer et al.	06/15/93	
	BV	5,219,596		Tischer et al.	06/15/93	
	BW	5,198,346		Ladner et al.	03/30/93	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231
PA 3202253 v1



Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **3** of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	BX	5,194,596		Smith et al.	03/16/93	RECEIVED FEB 24 2004
	BY	5,096,815		Ladner et al.	03/17/92	
	BZ	5,096,814		Aivasidis et al.	03/17/92	
	CA	5,073,492		Chen et al.	12/17/91	
	CB	4,990,607		Katagiri et al.	02/5/91	
	CC	4,456,550		Dvorak et al.	06/26/84	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	CD		WO 00/45835		PCT	08/10/00		
	CE		WO 00/44903		PCT	08/03/00		
	CF		WO 00/42219		PCT	07/20/00		
	CG		WO 00/41566		PCT	07/20/00		
	CH		WO 00/37641		PCT	06/29/00		
	CI		WO 00/27878		PCT	05/18/00		
	CJ		WO 00/25805		PCT	05/11/00		
	CK		WO 00/23464		PCT	04/27/00		
	CL		WO 00/09148		PCT	02/24/00		
	CM		WO 99/50290		PCT	10/07/99		
	CN		WO 99/48909		PCT	09/30/99		
	CO		WO 99/47677		PCT	09/23/99		
	CP		WO 99/47656		PCT	09/23/99		
	CQ		WO 99/46364		PCT	09/16/99		

Examiner
Signature

Date
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231
PA 3202253 v1

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **4** of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office	Number ⁴	Kind Code ⁵ (if known)				
	CR		WO 99/45132		PCT	09/10/99		
	CS		WO 99/42474		PCT	08/26/99		
	CT		WO 99/41371		PCT	08/19/99		
	CU		WO 99/40197		PCT	08/12/99		
	CV		WO 99/37671		PCT	07/29/99		
	CW		WO 99/36553		PCT	07/22/99		
	CX		WO 99/33485		PCT	07/08/99		
	CY		WO 98/54311		PCT	12/03/98		
	CZ		WO 98/53060		PCT	11/26/98		
	DA		WO 98/53059		PCT	11/26/98		
	DB		WO 98/53058		PCT	11/26/98		
	DC		WO 98/53057		PCT	11/26/98		
	DD		WO 98/49300		PCT	11/05/98		
	DE		WO 98/33917		PCT	08/06/98		
	DF		WO 98/24811		PCT	06/11/98		
	DG		WO 98/10078		PCT	03/12/98		
	DH		WO 98/10071		PCT	03/12/98		
	DI		WO 98/07832		PCT	02/26/98		
	DJ		WO 97/27213		PCT	07/31/97		
	DK		WO 97/27212		PCT	07/31/97		
	DL		WO 97/17442		PCT	05/15/97		
	DM		WO 97/09427		PCT	03/13/97		
	DN		WO 97/05250		PCT	02/13/97		
	DO		WO 96/39515		PCT	12/12/96		

RECEIVED
FEB 24 2004

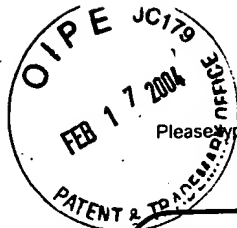
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231
PA 3202253 v1



Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/846,033		
		Filing Date	April 30, 2001		
		First Named Inventor	Rebar, Edward, et al.		
		Group Art Unit	1646		
		Examiner Name	Unassigned		
Sheet	5	of		Attorney Docket Number	019496-005820US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	DP		WO 96/32475		PCT	10/17/96		
	DQ		WO 96/27007		PCT	09/06/96	RECEIVED	
	DR		WO 96/26736		PCT	09/06/96		
	DS		WO 96/20951		PCT	07/11/96	FEB 24 2004	
	DT		WO 96/11269		PCT	04/18/96		
	DU		WO 96/11267		PCT	04/18/96		
	DV		WO 96/06166		PCT	02/29/96		
	DW		WO 96/06110		PCT	02/29/96		
	DX		WO 95/24473		PCT	09/14/95		
	DY		WO 95/19431		PCT	07/20/95		
	DZ		EP 0 935 001		EPO	08/11/95		
	EA		EP 0 875 567		EPO	11/04/98		abstract
	EB		EP 0 506 477		EPO	09/30/92		
	EC		EP 0 484 401		EPO	07/27/90		
	ED		EP 0 476 983		EPO	03/15/00		
	EE		EP 0 471 754		EPO	11/15/90		
	EF		EP 0 464 155		EPO	10/04/90		
	EG		EP 0 126 153		EPO	06/07/84		

RECEIVED
FEB 24 2004

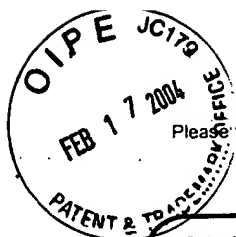
Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

PA 3202253 v1



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **6**

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	EH	Agarwal et al., "Stimulation of Transcript Elongation Requires both the Zinc Finger and RNA Polymerase II Binding Domains of Human TFIIS," <u>Biochemistry</u> , 30(31):7842-7851 (1991).	
	EI	Achen et al., "Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flk1) and vEGF receptor 3 (Flt4)," <u>PNAS</u> , 95:549-553 (1998).	
	EJ	Akiri et la. "Regulation of Vascular Endothelial Growth Factor (VEGF) expression is mediated by internal initiation of translation and alternative initiation of transcription," <u>Oncogene</u> , 17:227-236 (1998).	
	EK	Antao et al., "A thermodynamic study of unusually stable RNA and DNA hairpins," <u>Nuc. Acids. Res.</u> , 19(21):5901-5905 (1991).	
	EL	Barbas et al., "Assembly of combinatorial antibody libraries on phage surfaces: The gene III site," <u>PNAS</u> , 88:7978-7982 (1991).	
	EM	Barbas et al., "Semisynthetic combinatorial antibody libraries: A chemical solution to the diversity problem," <u>PNAS</u> , 89:4457-4461 (1992).	
	EN	Barbas, C. F., "Recent advances in phage display," <u>Curr. Opin. Biotech.</u> , 4:526-530 (1993).	
	EO	Bartsevich et al., "Regulation of the MDR1 Gene by Transcriptional Repressors Selected using peptide Cominatorial Libraries," <u>Mol. Pharmacol.</u> , 58:1-10 (2000).	
	EP	Bartsevich et al., "Regulation of the MDR1 Gene By Transcriptional Repressors Selected Using Peptide Cominatorial Libraries," <u>Mol. Pharmacol.</u> , 58: 1-10 (2000).	
	EQ	Beerli et al., "Positive and Negative Regulation of Endogenous Genes Designed by Transcription Factors," <u>PNAS</u> , 97: 1495-1500 (2000).	
	ER	Beerli, R.R. et al. "Toward controlling gene expression at will: Specific regulation of the <i>erbB-2/HER-2</i> promoter by using polydactyl zinc finger proteins constructed from modular building blocks," <u>PNAS</u> , 95:14628-14633 (1998).	
	ES	Bellefroid et al., "Clustered organization of homologous KRAB zinc-finger genes with enhanced expression in human T lymphoid cells," <u>EMBO J.</u> , 12(4):1363-1374 (1993).	
	ET	Berg et al., "The Galvanization of Biology: A Growing Appreciation for the Roles of Zinc," <u>Science</u> , 271:1081-1085 (1996).	

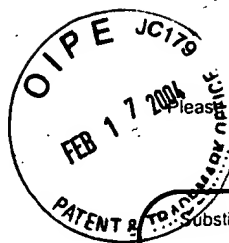
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 7 of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

FEB 24 2004

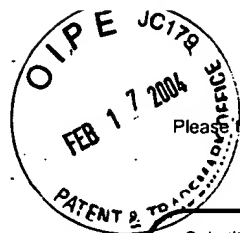
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	EU	Berg, J. M., "DNA Binding Specificity of Steroid Receptors," <u>Cell</u> , 57:1065-1068 (1989).	
	EV	Berg, J. M., "Sp1 and the subfamily of zinc finger proteins with guanine-rich binding sites," <u>PNAS</u> , 89:11109-11110 (1992).	
	EW	Berg, J.M., "Letting your fingers do the walking," <u>Nature Biotechnology</u> , 15:323 (1997).	
	EX	Bergqvist et al., "Loss of DNA-binding and new transcription <i>trans</i> -activation function in polyomavirus large T-antigen with mutation of zinc finger motif," <u>Nuc. Acids Res.</u> , 18(9):2715-2720 (1990).	
	EY	Birkenhager, R., "Synthesis and physiological activity of heterodimers comprising different splice forms of vascular endothelial growth factor and placenta growth factor," <u>Biochem. J.</u> , 316:703-707 (1996).	
	EZ	Blaese et al., "Vectors in cancer therapy: how will they deliver?," <u>Cancer Gene Therapy</u> , 2(4):291-297 (1995).	
	FA	Cao, Y. "Heterodimers of Placenta Growth Factor/Vascular Endothelial Growth Factor," <u>J. Biol. Chem.</u> , 271: 3154-3162 (1996).	
	FB	Cao, Y. "Placenta Growth Factor: Identification and Characterization of a Novel Isoform Generated by RNA Alternative Splicing," <u>Biochem. Biophys. Res Commun.</u> , 235: 493-498 (1997).	
	FC	Caponigro et al., "Transdominant genetic analysis of a growth control pathway," <u>PNAS</u> , 95:7508-7513 (1998).	
	FD	Carmeliet et al., "Abnormal blood vessel development and lethality in embryos lacking a single VEGF allele," <u>Nature</u> , 380: 435-442 (1996).	
	FE	Carmeliet et al., "Impaired myocardial angiogenesis and ischemic cardiomyopathy in mice lacking the vascular endothelial growth factor isoforms VEGF 164 and VEGF 188," <u>Nature Med.</u> , 5: 495-502 (1999).	
	FF	Celenza et al., "A Yeast Gene That Is Essential for Release from Glucose Repression Encodes a Protein Kinase," <u>Science</u> , 233:1175-1180 (1986).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

8

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED**FEB 24 2004****OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

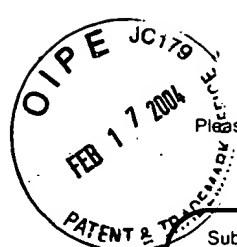
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	FG	Cheng et al., "A Single Amino Acid substitution in Zinc Finger 2 of Adr1p Changes its Binding Specificity at two Positions in UAS1," <u>J. Mol. Biol.</u> , 251:1-8 (1995).	
	FH	Cheng et al., "Identification of Potential Target Genes for Adr1p through Characterization of Essential Nucleotides in UAS1," <u>Mol. Cellular Biol.</u> , 14(6):3842-3852 (1994).	
	FI	Choo et al., "A role in DNA binding for the linker sequences of the first three zinc fingers of TFIIIA," <u>Nuc. Acids Res.</u> , 21(15):3341-3346 (1993).	
	FJ	Choo et al., "Advances in Zinc Finger Engineering," <u>Current Opinion in Structural Biology</u> , 10:33850-3860 (2000).	
	FK	Choo et al., "All wrapped up," <u>Nature Structural Biology</u> , 5(4):253-255 (1998).	
	FL	Choo et al., "Designing DNA-binding proteins on the surface of filamentous phage," <u>Curr. Opin. Biotechnology</u> , 6:431-436 (1995).	
	FM	Choo et al., "Physical basis of a protein-DNA recognition code," <u>Curr. Opin. Struct. Biol.</u> , 7(1):117-125 (1997).	
	FN	Choo et al., "Promoter-specific Activation of Gene Expression Directed by Bacteriophage-selected Zinc Fingers," <u>J. Mol. Biol.</u> , 273:525-532 (1997).	
	FO	Choo, Y. and Klug, A. "Selection of DNA binding sites for zinc fingers using rationally randomized DNA reveals coded interactions." <u>PNAS</u> , 91:11168-11172 (1994).	
	FP	Choo, Y. and Klug, A. Toward a code for the interactions of zinc fingers with DNA: Selection of randomized fingers displayed on phage." <u>PNAS</u> , 91:11163-11167 (1994).	
	FQ	Choo, Y. et al. "In vivo repression by a site-specific DNA-binding protein designed against an oncogenic sequence." <u>Nature</u> , 372:642-645 (1994).	
	FR	Choo, Y., "End effects in DNA recognition by zinc finger arrays," <u>Nuc. Acids Res.</u> , 26(2):554-557 (1998).	
	FS	Choo, Y., "Recognition of DNA methylation by zinc fingers," <u>Nature Struct. Biol.</u> , 5(4):264-265 (1998).	
	FT	Chua et al., J. "Interleukin 6 Induces the expression of Vascular Endothelial Growth Factor," <u>Biol. Chem.</u> , 271: 736-741 (1996).	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

9

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS FEB 24 2004

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	FU	Clarke et al., "Zinc Fingers in <i>Caenorhabditis elegans</i> : Finding Families and Probing Pathways," <i>Science</i> , 282:2018-2022 (1998).	
	FV	Clauss, M., "The Vascular Endothelial Growth Factor Receptor Flt-1 Mediates Biological Activities," <i>J. Biol. Chem.</i> , 271: 17629-17634 (1996).	
	FW	Cohen, et al., "Interleukin 6 Induces the Expression of Vascular Endothelial Growth Factor," <i>The Journal of Biological Chemistry</i> , 271(2):736-741 (1996).	
	FX	"Collateral Therapeutics Inc. (CLTX) Announces Research On New Angiogenic Growth Factor Gene VEGF-138," (November 30, 2000) published at BioSpace.com.	
	FY	Connolly, "Vascular Permeability Factor: A Unique Regulator of Blood Vessel Function" <i>J. Cellular Biochem.</i> , 47: 219-223 (1991).	
	FZ	Corbi et al., "Synthesis of a New Zinc Finger Peptide; Comparison of Its 'Code' Deduced and 'CASTing' Derived Binding Sites," <i>FEBS Letters</i> , 417:71-74 (1997).	
	GA	Crozatier et al., "Single Amino Acid Exchanges in Separate Domains of the Drosophila serendipity δ Zinc Finger Protein Cause Embryonic and Sex Biased Lethality," <i>Genetics</i> , 131:905-916 (1992).	
	GB	Damert et al., Activator-protein-1 binding potentiates the hypoxia-inducible factor-1 mediated hypoxia-induced transcriptional activation of vascular-endothelial growth factor expression in C6 glioma cells," <i>Biochem. J.</i> 327: 419-423 (1997).	
	GC	Debs et al., "Regulation of Gene Expression <i>in Vivo</i> by Liposome-mediated Delivery of a Purified Transcription factor," <i>J. Biological Chemistry</i> , 265(18):10189-10192 (1990).	
	GD	Desjarlais et al., "Redesigning the DNA-Binding Specificity of a Zinc Finger Protein: A Data Base-Guided Approach," <i>Proteins: Structure, Function, and Genetics</i> , 12(2):101-104 (1992).	
	GE	Desjarlais et al., "Redesigning the DNA-Binding Specificity of a Zinc Finger Protein: A Data Base-Guided Approach," <i>Proteins: Structure, Function, and Genetics</i> , 13(3):272 (1992).	
	GF	Desjarlais, J.R. and Berg, J.M. "Length-encoded multiplex binding site determination: Application to zinc finger proteins," <i>PNAS</i> , 91:11099-11103 (1994).	

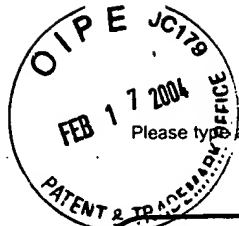
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **10**

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS****FEB 24 2004**

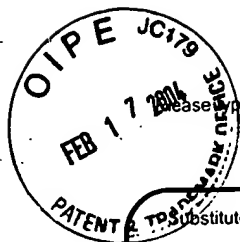
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	GG	Desjarlais, J.R. and Berg, J.M. "Toward rules relating zing finger protein sequences and DNA binding site preferences," <u>PNAS</u> , 90:7345-7349 (1992).	
	GH	Desjarlais, J.R. and Berg, J.M. "Use of a zinc-finger consensus sequence framework and specificity rules to design specific DNA binding proteins," <u>PNAS</u> , 90:2256-2260 (1993).	
	GI	Diaz et al., "Regulation of Vascular Endothelial Growth Factor Expression in Human Keratinocytes by Retinoids," <u>J. Biol. Chem.</u> , 275:642-650 (2000).	
	GJ	DiBello et al., "The Drosophila <i>Broad-Complex</i> Encodes a Family of Related Proteins Containing Zinc Fingers," <u>Genetics</u> , 129:385-397 (1991).	
	GK	Dreier et al. "Insights into the Molecular Recognition of the 5'GNN-3' Family of DNA Sequences by Zinc Finger Domains," <u>J. Mol. Biol.</u> , 303:489-502 (2000).	
	GL	Elrod-Erickson et al., "High-resolution structures of variant Zif268-DNA complexes: implications for understanding zinc finger-DNA recognition," <u>Structure</u> , 6(4):451-464 (1998).	
	GM	Elrod-Erickson et al., "Zif268 protein-DNA complex refined at 1.6 Å: a model system for understanding zinc finger-DNA interactions," <u>Structure</u> , 4(10):1171-1180 (1996).	
	GN	Esakof et al., "Intraoperative Multiplane Transesophageal Echocardiography for Guiding Direct Myocardial Gene Transfer of Vascular Endothelial Growth Factor in Patients with Refractory Angina Pectoris," <u>Hum. Gene Ther.</u> , 10:2307-2314 (1999).	
	GO	Fairall et al., "The crystal structure of a two zinc-finger peptide reveals an extension to the rules for zinc-finger/DNA recognition," <u>Nature</u> , 366:483-487 (1993).	
	GP	Ferrara et al., "Heterozygous embryonic lethality induced by targeted inactivation of the VEGF gene," <u>Nature</u> , 380: pp. 439-442 (1996).	
	GQ	Ferrara et al., "The Vascular Endothelial Growth Factor Family of Polypeptides," <u>J Cellular Biochem.</u> , 47:211-218.(1991).	
	GR	Forsythe et al., "Activation of Vascular Endothelial Growth Factor Gene Transcription by Hypoxia-Inducible Factor 1," <u>Mol. Cell. Biol.</u> , 16:4604-4613 (1996).	
	GS	Frankel et al., "Fingering Too Many Proteins," <u>Cell</u> , 53:675 (1988).	

Examiner
SignatureDate
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please place a plus sign (+) inside this box



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

11

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	GT	Friesen et al., "Phage Display of RNA Binding Zinc Fingers from Transcription Factor IIIA*," <u>J. Biological Chem.</u> , 272(17):10994-10997 (1997).
	GU	Friesen et al., "Specific RNA binding proteins constructed from zinc fingers," <u>Nature Structural Biology</u> , 5(7):543-546(1998).
	GV	Gen Bank Accession No. V41383 (GI 1134964) " <u>Mus Musculus</u> Vascular Endothelial Growth Factor (VEGF) Gene, Partial eds. and Promoter Region," (04/17/96).
	GW	GenBank Accession No. AC015837 (GI7407936) Homo Sapiens, clone RP11-23117," (04/04/00).
	GX	GenBank Accession No. AF 106020 (GI4139223) "A Novel Vascular Endothelial Growth factor Encoded by Orf Virus, VEGF-E, mediates angiogenesis via signalling through VEGFR-2 (KDR) but not VEGFR-1 (Flt-1) receptor tyrosine Kinases," (03/11/99).
	GY	GenBank Accession No. AF020393 (GI2582366) Genomic organization of human and mouse genes for vascular endothelial growth factor C," (11/02/97).
	GZ	GenBank Accession No. AF095785 (GI4154290) "Two novel polymorphisms in the promotor region of the human vascular endothelial growth factor (VEGF) gene," (01/14/99).
	HA	GenBank Accession No. HSU 69570 (GI 1825473) "Direct Submission," (02/07/97).
	HB	GenBank Accession No. HSU80601 (GI 1815657) "Analysis of the Promotor Region of the Human VEGF- related Factor Gene," (02/05/97).
	HC	GenBank Accession No. HSY 12864 (GI 2909351) "Human FIG F: cloning, gene structure, and mapping to chromosome Xp22.1 between the PIGA and the GRPR genes," (08/02/99).
	HD	GenBank Accession No. S67520 (GI 456897) "Homologs of Vascular Endothelial Growth Factor are Encoded by the Poxvirus Orf Virus," <u>J. Virol.</u> , 68 (1):84-92 (1994).
	HE	GenBank Accession No. AF091434 (GI6002592) "Homo sapiens secretory growth factor-like protein fallotein mRNA, complete cds," (06/22/00).

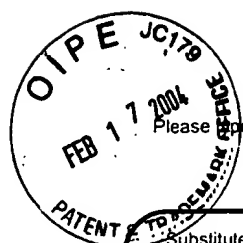
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **12**

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	HF	GenBank Accesion No. U80601 "Human novel unknown gene, partial 3'UTR, and VEGF-related factor (VRF) gene, promoter region," (02/05/97).	
	HG	Gogos et al., "Recognition of diverse sequences by class I zinc fingers: Asymmetries and indirect effects on specificity in the interaction between CF2II and A+T-rich sequence elements," <u>PNAS</u> , 93(5):2159-2164 (1996).	
	HH	Ghosh, D., "A relational database of transcription factors," <u>Nuc. Acids Res.</u> , 18(7):1749-1756 (1990).	
	HI	Gossen et al., "Tight control of gene expression in mammalian cells by tetracycline-responsive promoters," <u>PNAS</u> , 89:5547-5551 (1992).	
	HJ	Grant et al., "Exploring the Role of Glutamine 50 in the Homeodomain-DNA Interface: Crystal Structure of Engrailed (Gln50→Ala) Complex at 2.0Å," <u>Biochemistry</u> , 39:8187-8192 (2000).	
	HK	Greisman, H.A. and Pabo, C.O. "A general strategy for selecting high-affinity zinc finger proteins for diverse DNA target sites," <u>Science</u> , 275:657-661. (1997).	
	HL	Grunstein et al., "Isoforms of Vascular Endothelial Growth Factor Act in a Coordinate Fashion to Recruit and Expand Tumor Vasculature," <u>Mol. Cell. Biol.</u> , 20:728-7291 (2000).	
	HM	Hamilton et al., "Comparison of the DNA Binding Characteristics of the Related Zinc Finger Proteins WT1 and EGR1," <u>Biochemistry</u> , 37:2051-2058 (1998).	
	HN	Hamilton et al., "High affinity binding sites for the Wilms' tumor suppressor protein WT1," <u>Nuc. Acids Res.</u> , 23(2):277-284 (1995).	
	HO	Hanas et al., "Internal deletion mutants of <i>Xenopus</i> transcription factor IIIA," <u>Nuc. Acids Res.</u> , 17(23):9861-9870 (1989).	
	HP	Hayes et al., "Locations of Contacts between Individual Zinc Fingers of <i>Xenopus laevis</i> Transcription Factor IIIA and the Internal Control Region of a 5S RNA Gene," <u>Biochemistry</u> , 31:11600-11605 (1992).	
	HQ	Heinzel et al., "A complex containing N-CoR, mSin3 and histone deacetylase mediates transcriptional repression," <u>Nature</u> , 387:43-48 (1997).	

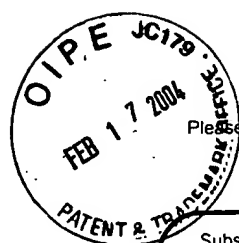
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐ +

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 13

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), date of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	HR	Hendel et al., "Effect of Intracoronary Recombinant Human Vascular Endothelial Growth Factor on Myocardial Perfusion," <u>Circulation</u> 101:118-121 (2000).	
	HS	Hirst et al., "Discrimination of DNA response elements for thyroid hormone and estrogen is dependent on dimerization of receptor DNA binding domains," <u>PNAS</u> , 89:5527-5531 (1992).	
	HT	Hoffman et al., "Structures of DNA-binding mutant zinc finger domains: Implications for DNA binding," <u>Protein Science</u> , 2:951-965 (1993).	
	HU	Ikeda et al., "Hypoxia-induced Transcriptional Activation and Increased mRNA Stability of Vascular Endothelial Growth Factor in C6 Glioma Cells," <u>J. Biol.Chem.</u> , 270: 19, 761-19, 766 (1995).	
	HV	Isalan et al., "Comprehensive DNA Recognition through Concerted Interactions from Adjacent Zinc Fingers," <u>Biochemistry</u> , 37:12026-12033 (1998).	
	HW	Isalan et al., "Synergy between adjacent zinc fingers in sequence-specific DNA recognition," <u>PNAS</u> , 94(11):5617-5621 (1997).	
	HX	Isner et al., "Clinical evidence of angiogenesis after arterial gene transfer of phVEGF 165 in pateint with ischaemic limb," <u>Lancet</u> , 348:370-374 (1996).	
	HY	Jacobs, G. H., "Determination of the base recognition positions of zinc fingers from sequence analysis," <u>EMBO J.</u> , 11(12):4507-4517 (1992).	
	HZ	Jamieson et al., "A zinc finger directory for high-affinity DNA recognition," <u>PNAS</u> , 93:12834-12839 (1996).	
	IA	Jamieson, A.C. et al. "In vitro selection of zinc fingers with altered DNA-binding specificity," <u>Biochemistry</u> , 33:5689-5695 (1994).	
	IB	Joukov et al., "A novel vascular endothelial growth factor, VEGFC, is a ligand for the Flt4 (VEGFR-3) and KDR (VEGFR-2) receptor tyrosine kinases," <u>EMBO J.</u> 15: 290-298 (1996).	
	IC	Julian et al., "Replacement of His23 by Cys in a zinc finger of HIV-1 NCp7 led to a change in 1H NMR-derived 3D structure and to a loss of biological activity," <u>FEBS Letters</u> , 331(1,2):43-48 (1993).	

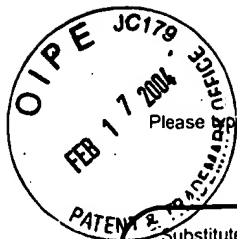
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

14

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS****FEB 24 2004**

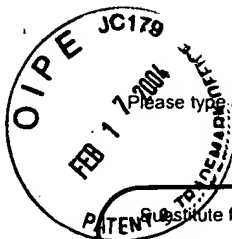
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	ID	Kamiuchi et al., "New multi zinc finger protein: biosynthetic design and characteristics of DNA recognition," <u>Nucleic Acids Symposium Series</u> , 37:153-154 (1997).	
	IE	Kang et al., "Zinc Finger Proteins as Designer Transcription Factors," <u>J. Biol. Chem.</u> , 275(12):8742-8748 (2000).	
	IF	Keck et al., "Vascular Permeability Factor, an Endothelial Cell Mitogen Related to PDGF," <u>Science</u> , 246: 1309-1312 (1989).	
	IG	Kim et al., "A 2.2 Å resolution crystal structure of a designed zinc finger protein bound to DNA," <u>Nat. Struct. Biol.</u> , 3(11):940-945 (1996).	
	IH	Kim et al., "Design of TATA box-binding protein/zinc finger fusions for targeted regulation of gene expression," <u>PNAS</u> , 94:3616-3620 (1997).	
	II	Kim et al., "Hybrid restriction enzymes: Zinc finger fusions to <i>Fok</i> I cleavage domain," <u>PNAS</u> , 93:1156-1160 (1996).	
	IJ	Kim et al., "Serine at Position 2 in the DNA Recognition helix of a Cys2-His2 Zinc finger Peptide is Not, in General, Responsible for Base Recognition," <u>J. Mol. Biol.</u> , 252:1-5 (1995).	
	IK	Kim et al., "Site-specific cleavage of DNA-RNA hybrids by zinc finger/ <i>Fok</i> I cleavage domain fusions," <u>Gene</u> , 203:43-49 (1997).	
	IL	Kim, J-S. and Pabo, C.O. "Getting a handhold on DNA: Design of poly-zinc finger proteins with femtomolar dissociation constants," <u>PNAS</u> , 95:2812-2817 (1998).	
	IM	Kim, J-S. and Pabo, C.O. "Transcriptional repression by zinc finger peptides," <u>The Journal of Biological Chemistry</u> , 272:29795-28000 (1997).	
	IN	Kimura et al., "Hypoxia response element of the human vascular endothelial growth factor gene mediates transcriptional regulation by nitric oxide: control of hypoxia-inducible factor-1 activity by nitric oxide," <u>Blood</u> , 95: 189-197 (2000).	
	IO	Kinzler et al., "The GLI gene is a member of the Kruppel family of zinc finger proteins," <u>Nature</u> , 332:371-4 (1988).	
	IP	Klug et al., "Protein Motifs 5: Zinc Fingers," <u>FASEB J.</u> , 9:597-604 (1995).	

Examiner
SignatureDate
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **15** of **15**

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	IQ	Klug, "Zinc Finger Peptides for the Regulation of Gene Expression," <u>J. Mol. Biol.</u> , 293:215-218 (1999).	
	IR	Klug, A., "Gene Regulatory Proteins and Their Interaction with DNA," <u>Ann. NY Acad. Sci.</u> , 758:143-160 (1995).	
	IS	Kothekar, "Computer Simulation of Zinc Finger Motifs from Cellular Nucleic Acid Binding Proteins and their Interaction with Consensus DNA Sequences," <u>FEBS Letters</u> , 274(1,2):217-222 (1990).	
	IT	Kriwacki <i>et al.</i> , "Sequence-Specific Recognition of DNA by Zinc-Finger Peptides Derived from the Transcription Factor Sp1," <u>PNAS</u> , 89:9759-9763 (1992).	
	IU	Kudla <i>et al.</i> , "The regulatory gene <i>area</i> mediating nitrogen metabolite repression in <i>Aspergillus nidulans</i> . Mutations affecting specificity of gene activation alter a loop residue of a putative zinc finger," <u>EMBO J.</u> , 9(5):1355-1364 (1990).	
	IV	Ladoux <i>et al.</i> , "Cobalt Stimulates the Expression of Vascular Endothelial Growth Factor mRNA in Rat Cardiac Cells," <u>Biochem Biophys. Res. Commun.</u> 204:794-798 (1994).	
	IW	Laird-Offringa <i>et al.</i> , "RNA-binding proteins tamed," <u>Nat. Structural Biol.</u> , 5(8):665-668 (1998).	
	IX	Lee <i>et al.</i> , "Vascular endothelial growth factor-related protein: A ligand and specific activator of the tyrosine kinase receptor Flt4," <u>PNAS</u> , 93: 1988-1992 (1996).	
	IY	Leung <i>et al.</i> , k "Vascular Endothelial Growth Factor Is a Secreted Angiogenic Mitogen," <u>Science</u> , 246: 1306-1309 (1989).	
	IZ	Levy <i>et al.</i> , Transcriptional Regulation of the Rat Vascular Endothelial Growth Factor Gene by Hypoxia," <u>J. Biol. Chem.</u> , 270: 13,333-13,340 (1995).	
	JA	Liu <i>et al.</i> , "Hypoxia Regulates Vascular Endothelial Growth Factor Gene Expression in Endothelial Cells," <u>Circ. Res.</u> , 77: 638-643 (1995).	
	JB	Liu, Q. <i>et al.</i> "Design of polydactyl zinc-finger proteins for unique addressing within complex genomes," <u>PNAS</u> , 95:5525-5530 (1997).	
	JC	Lyttle, D.J. <i>et al.</i> , "Homologs of Vascular Endothelial Growth Factor are Encoded by the Poxvirus Orf Virus," <u>J. Virology</u> , 68: 84-92 (1994).	

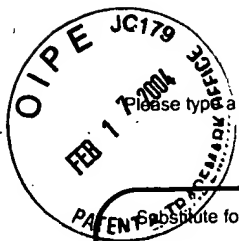
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 16

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	JD	Maglione et al., "Isolation of a human placenta cDNA coding for a prtein related to the vascular permeability factor," <u>PNAS</u> , 88: 9267-9271 (1991).	
	JE	Mandel-Gutfreund et al., "Quantitative parameters for amino acid-base interaction: implications for prediction of protein-DNA binding sites," <u>Nuc. Acids Res.</u> , 26(10):2306-2312 (1998).	
	JF	Margolin et al., "Kruppel-associated boxes are potent transcriptional repression domains," <u>PNAS</u> , 91:4509-4513 (1994).	
	JG	McNamara et al., " A novel four zinc-finger protein targeted against p190 (BcrAbl) fusion oncogene cDNA: utilizaition of zinc-finger recognition codes," <u>Nucleic Acid Research</u> , 28(24):4865-4872 (2000).	
	JH	Meyer et al., "A Novel Vascular Endothelial Growth Factor Encoded by Orf virus, VEGF-E, mediates angiogenesis via signalling through VEGFR-2 (KDR) bu not VEGFR 1 (flt-1) receptor Tyrosine Kinases," <u>EMBO J.</u> , 18: 363-374 (1999).	
	JI	Migdal et al., "Neuropilin-1 Is a Placenta Growth Factor-2 receptor," <u>J.Biol. Chem.</u> , 273:22272-22278 (1998).	
	JJ	Milanini et al., "p42/p44 MAP Kinase Module Plays a Key Role in the Transcriptional Regulation of the Vascular Endothelial Growth Factor Gene in Fibroblasts," <u>J. Biol. Chem.</u> , 273: 18, 165-18,172 (1998).	
	JK	Mizushima et al., "pEF-BOS, a powerful mammalian expression vector," <u>Nuc. Acids Res.</u> , 18(17):5322 (1990).	
	JL	Nakagama et al., "Sequence and Structural Requirements for High-Affinity DNA Binding by the WT1 Gene Product," <u>Molecular and Cellular Biology</u> , 15(3):1489-1498 (1995).	
	JM	Nardelli et al., "Base sequence discrimination by zinc-finger DNA-binding domains," <u>Nature</u> , 349:175-178 (1991).	
	JN	Nardelli et al., "Zinc finger-DNA recognition: analysis of base specificity by site-directed mutagenesis," <u>Nuc. Acids Res.</u> , 20(16):4137-4144 (1992).	
	JO	Nekludova et al., "Distinctive DNA conformation with enlarged major groove is found in Zn-finger—DNA and other protein—DNA complexes," <u>PNAS</u> , 91:6948-6952 (1994).	

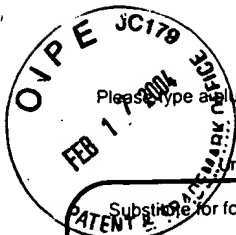
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type plus sign (+) inside this box →



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/846,033
		Filing Date	April 30, 2001
		First Named Inventor	Rebar, Edward, et al.
		Group Art Unit	1646
		Examiner Name	Unassigned
Sheet 17 of	Attorney Docket Number	019496-005820US	

RECEIVED

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	JP	Ogawa, S. et al., A Novel Type of Vascular Endothelial Growth Factor, VEGF-E (NZ-7 VEGF), Preferentially Utilizes KDR/FLK-1 Receptor and Carries a Potent Mitotic Activity without Heparin-binding Domain," <u>J. Biol. Chem.</u> , 273:31273-31282 (1998).	
	JQ	Olofsson et al., "Vascular endothelial growth factor B, a novel growth factor for endothelial cells," <u>PNAS</u> , 93: 2576-2581 (1996).	
	JR	Orkin et al., "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy," <u>NIH Homepage</u> , 41 pages total (1995).	
	JS	Pabo et al., "Geometric Analysis and Comparison of Protein-DNA Interfaces: Why is there no simple code for recognition," <u>J. Mol. Biol.</u> , 301:597-635 (2000).	
	JT	Pabo et al., "Protein-DNA Recognition," <u>Ann. Rev. Biochem.</u> , 53:293-321 (1984).	
	JU	Pabo et al., "Systematic Analysis of Possible Hydrogen Bonds between Amino Acid Side Chains and B-form DNA," <u>J. Biomolecular Struct. Dynamics</u> , 1:1039-1049 (1983).	
	JV	Pabo, C. O., "Transcription Factors: Structural Families and Principals of DNA Recognition," <u>Ann. Rev. Biochem.</u> , 61:1053-1095 (1992).	
	JW	Pavletich et al., "Crystal Structure of a Five-Finger GLI-DNA Complex: New Perspectives on Zinc Fingers," <u>Science</u> , 261:1701-1707 (1993).	
	JX	Pavletich et al., "Zinc Finger-DNA Recognition: Crystal Structure of a Zif268-DNA Complex at 2.1 Å," <u>Science</u> , 252:809-817 (1991).	
	JY	Pengue et al., "Kruppel-associated box-mediated repression of RNA polymerase II promoters is influenced by the arrangement of basal promoter elements," <u>PNAS</u> , 93:1015-1020 (1996).	
	JZ	Pengue et al., "Repression of transcriptional activity at a distance by the evolutionarily conserved KRAB domain present in a subfamily of zinc finger proteins," <u>Nuc. Acids Res.</u> , 22(15):2908-2914 (1994).	
	KA	Pengue et al., "Transcriptional Silencing of Human Immunodeficiency Virus Type 1 Long Terminal Repeat-Driven Gene Expression by the Kruppel-Associated Box Repressor Domain Targeted to the Transactivating Response Element," <u>J. Virology</u> , 69(10):6577-6580 (1995).	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 949B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **18**

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	KB	Pettersson et al., "Heterogeneity of the Angiogenic Response Induced in Different Normal Adult Tissues by Vascular Permeability Factor/Vascular Endothelial Growth Factor," <u>Laboratory Investigation</u> , 80:99-115 (2000).	
	KC	Pomerantz et al., "Analysis of homeodomain function by structure-based design of a transcription factor," <u>PNAS</u> , 92:9752-9756 (1995).	
	KD	Pomerantz et al., "Structure-Based Design of a Dimeric Zinc Finger Protein," <u>Biochemistry</u> , 37(4):965-970 (1998).	
	KE	Pomerantz, J.L. et al. "Structure-based design of transcription factors," <u>Science</u> , 267:93-96 (1995).	
	KF	Qian et al., "Two-dimensional NMR Studies of the Zinc Finger Motif: Solution Structures and Dynamics of Mutant ZFY Domains Containing Aromatic Substitutions in the Hydrophobic Core," <u>Biochemistry</u> , 31:7463-7476 (1992).	
	KG	Quigley et al., "Complete Androgen Insensitivity Due to Deletion of Exon C of the Androgen Receptor Gene Highlights the Functional Importance of the Second Zinc Finger of the Androgen Receptor <i>in Vivo</i> ," <u>Molecular Endocrinology</u> , 6(7):1103-1112 (1992).	
	KH	Rauscher et al., "Binding of the Wilms' Tumor Locus Zinc Finger Protein to the EGR-1 Consensus Sequence," <u>Science</u> , 250:1259-1262 (1990).	
	KI	Ray et al., "Repressor to activator switch by mutations in the first Zn finger of the glucocorticoid receptor: Is direct DNA binding necessary?," <u>PNAS</u> , 88:7086-7090 (1991).	
	KJ	Rebar et al., "Phage Display Methods for Selecting Zinc Finger Proteins with Novel DNA-Binding Specificities," <u>Methods in Enzymology</u> , 267:129-149 (1996).	
	KK	Rebar, E.J. and Pabo, C.O. "Zinc finger phage: Affinity selection of fingers with new DNA-binding Specificities." <u>Science</u> , 263:671-673 (1994).	
	KL	Reith et al., "Cloning of the major histocompatibility complex class II promoter binding protein affected in a hereditary defect in class II gene regulation," <u>PNAS</u> , 86:4200-4204 (1989).	

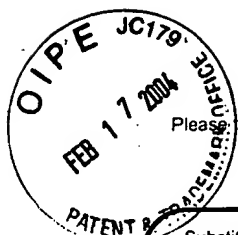
Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **19** of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	KM	Rhodes et al., "Zinc Fingers: They play a key part in regulating the activity of genes in many species, from yeast to humans. Fewer than 10 years ago no one knew they existed," <u>Scientific American</u> , 268:56-65 (1993).	
	KN	Rice et al., "Inhibitors of HIV Nucleocapsid Protein Zinc Fingers as Candidates for the Treatment of AIDS," <u>Science</u> , 270:1194-1197 (1995).	
	KO	Rivera et al., "A humanized system for pharmacologic control of gene expression," <u>Nature Medicine</u> , 2(9):1028-1032 (1996).	
	KP	Rollins et al., "Role of TFIIIA Zinc Fingers In vivo: Analysis of Single-Finger Function in Developing <i>Xenopus</i> Embryos," <u>Molecular Cellular Biology</u> , 13(8):4776-4783 (1993).	
	KQ	Rosengart et al., "Angiogenesis Gene Therapy- Phase I Assessment of Direct Intramyocardial Administration of an Adenovirus Vector expressing VEGF121 cDNA to Individuals with Clinically Significant Severe Coronary Artery Disease," <u>Circulation</u> , 100: 468-474 (1999).	
	KR	Rosengart et al., "Six-Month Assessment of a Phase 1 Trial of Angiogenic Gene Therapy for the Treatment of Coronary Artery Disease Using Direct Intramyocardial Administration of an Adenovirus Vector Expressing the VEGF121 cDNA," <u>Ann. Surg.</u> , 230: 466-470 (1999).	
	KS	Ruben et al., "Isolation of a rel-Related Human cDNA that Potentially Encodes the 65-kD Subunit of NF-kB," <u>Science</u> , 251: 1490-1493 (1991).	
	KT	Ryuto et al., "Induction of Vascular Endothelial Growth Factor by Tumor Necrosis Factor α in Human Glioma Cells," <u>J. Biol. Chem.</u> , 271:28, 220- 28, 228 (1996).	
	KU	Sadowski et al., "GAL4-VP16 is an unusually potent transcriptional activator," <u>Nature</u> , 335: 563-568 (1998).	
	KV	Saleh et al., "A Novel Zinc Finger Gene on Human Chromosome 1qter That Is Alternatively Spliced in Human Tissues and Cell Lines," <u>Am. J. Hum. Genet.</u> , 52:192-203 (1993).	
	KW	Salimath et al., "Expression of the vascular endothelial growth factor gene is inhibited by p73," <u>Oncogene</u> , 19: 3470-3746 (2000).	

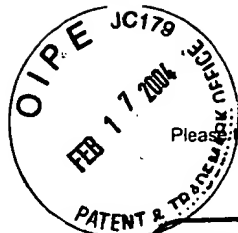
Examiner
Signature

Date
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **20** of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	KX	Segal et al. "Design of Novel Sequence-Specific DNA-binding proteins," <u>Current Opinion in Chemical Biology</u> , 4:34-39 (2000).	
	KY	Segal et al. "Toward controlling gene expression at will: Selection and design of zinc finger domains recognizing each of the 5'-GNN-3' DNA target sequences," <u>PNAS</u> , 96:2758-2763 (1999).	
	KZ	Shi et al., "A direct comparison of the properties of natural and designed finger proteins," <u>Chem. & Biol.</u> , 2(2):83-89 (1995).	
	LA	Shi et al., "DNA Unwinding Induced by Zinc Finger Protein Binding," <u>Biochemistry</u> , 35:3845-3848 (1996).	
	LB	Shi et al., "Specific DNA-RNA Hybrid Binding by Zinc Finger Proteins," <u>Science</u> , 268:282-284 (1995).	
	LC	Singh et al., "Molecular Cloning of an Enhancer Binding Protein: Isolation by Screening of an Expression Library with a Recognition Site DNA," <u>Cell</u> , 52:415-423 (1988).	
	LD	Skerka et al., "Coordinate Expression and Distinct DNA-Binding Characteristics of the Four EGR-Zinc Finger Proteins in Jurkat T Lymphocytes," <u>Immunobiology</u> , 198:179-191 (1997).	
	LE	Soker et al., "Neuropilin-1 Is Expressed by Endothelial and Tumor Cells as an Isoform-Specific Receptor for Vascular Endothelial Growth Factor," <u>Cell</u> , 92: 735-745 (1998).	
	LF	South et al., "The Nucleocapsid Protein Isolated from HIV-1 Particles Binds Zinc and Forms Retroviral-Type Zinc Fingers," <u>Biochemistry</u> , 29:7786-7789 (1990).	
	LG	Suzuki et al. "DNA recognition code of transcription factors in the helix-turn-helix, probe helix, hormone receptor, and zinc finger families," <u>PNAS</u> , 91:12357-12361 (1994).	
	LH	Suzuki et al., "Stereochemical basis of DNA recognition by Zn fingers," <u>Nuc. Acids Res.</u> , 22(16):3397-3405 (1994).	
	LI	Swirnoff et al., "DNA-Binding Specificity of NGFI-A and Related Zinc Finger Transcription Factors," <u>Mol. Cell. Biol.</u> , 15(4):2275-2287 (1995).	
	LJ	Taylor et al, "Designing Zinc-Finger ADR1 Mutants with Altered Specificity of DNA Binding to T in UAS1 Sequences," <u>Biochemistry</u> , 34:3222-3230 (1995).	

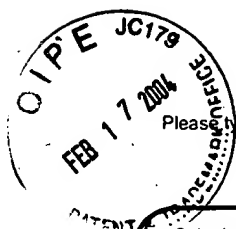
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **21**

of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	LK	Thiesen et al., "Amino Acid Substitutions in the SP1 Zinc Finger Domain Alter the DNA Binding Affinity to Cognate SP1 Target Site," <u>Biochem. Biophys. Res. Communications</u> , 175(1):333-338 (1991).	
	LL	Thiesen et al., "Determination of DNA binding Specificities of mutated zinc finger domains," <u>FEBS Letters</u> , 283(1):23-26 (1991).	
	LM	Thukral et al., "Alanine scanning site-directed mutagenesis of the zinc fingers of transcription factor ADR1: Residues that contact DNA and that transactivate," <u>PNAS</u> , 88:9188-9192 (1991).	
	LN	Thukral et al., "Alanine scanning site-directed mutagenesis of the zinc fingers of transcription factor ADR1: residues that contact DNA and that transactivate," <u>PNAS</u> , 90:7908 (1993).	
	LO	Thukral et al., "Localization of a Minimal Binding Domain and Activation Regions in Yeast Regulatory Protein ADR1," <u>Molecular Cellular Biology</u> , 9(6):2360-2369 (1989).	
	LP	Thukral et al., "Mutations in the Zinc Fingers of ADR1 That Change the Specificity of DNA Binding and Transactivation," <u>Mol. Cell Biol.</u> , 12(6):2784-2792 (1992).	
	LQ	Thukral et al., "Two Monomers of Yeast Transcription Factor ADR1 Bind a Palindromic Sequence Symmetrically to Activate <i>ADH2</i> Expression," <u>Molecular Cellular Biol.</u> , 11(3):1566-1577 (1991).	
	LR	Vortkamp et al., "Identification of Optimized Target Sequences for the GLI3 Zinc Finger Protein," <u>DNA Cell Biol.</u> , 14(7):629-634 (1995).	
	LS	Wang et al., "Dimerization of Zinc Fingers Mediated by Peptides Evolved <i>In Vitro</i> from Random Sequences," <u>PNAS</u> , 96:9568-9573 (1999).	
	LT	Webster et al., "Conversion of the E1A Cys4 zinc finger to a nonfunctional His2, Cys2 zinc finger by a single point mutation," <u>PNAS</u> , 88:9989-9993 (1991).	
	LU	Whyatt et al., "The two zinc finger-like domains of GATA-1 have different DNA binding specificities," <u>EMBO J.</u> , 12(13):4993-5005 (1993).	
	LV	Wilson et al., " <i>In Vivo</i> Mutational analysis of the NGFI-A Zinc Fingers*," <u>J. Biol. Chem.</u> , 267(6):3718-3724 (92).	

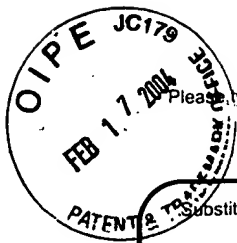
Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box ☐

PTO/SB/08B (08-00) ☐

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **22** of

Complete if Known

Application Number	09/846,033
Filing Date	April 30, 2001
First Named Inventor	Rebar, Edward, et al.
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	019496-005820US

RECEIVED

FEB 24 2004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	LW	Witzgall et al., "The Kruppel-associated box-A (KRAB-A) domain of zinc finger proteins mediates transcriptional repression," <u>PNAS</u> , 91:4514-4518 (1994).	
	LX	Wolfe et al., "Analysis of Zinc Fingers Optimized Via Phage Display: Evaluating the Utility of a Recognition Code," <u>J. Mol. Biol.</u> , 285:1917-1934 (1999).	
	LY	Wolfe et al., "Combining structure-base design with phage display to create new Cys2His2 zinc finger dimers," <u>Structure</u> , vol 8(7):739-750 (2000).	
	LZ	Wolfe et al., "DNA Recognition by Cys2His2 Zinc Finger Proteins," <u>Annu. Rev. Biophys. Struct.</u> , 3:183-212 (1999).	
	MA	Wright et al., "Expression of a Zinc Finger Gene in HTLV-I- and HTLV-II-transformed Cells," <u>Science</u> , 248:588-591 (1990).	
	MB	Wu, H. et al. "Building zinc fingers by selection: Toward a therapeutic application." <u>PNAS</u> , 92:344-348 (1995).	
	MC	Yang et al., "Surface plasmon resonance based kinetic studies of zinc finger-DNA interactions," <u>J. Immunol. Methods</u> , 183:175-182 (1995).	
	MD	Yu et al., "A hairpin ribozyme inhibits expression of diverse strains of human immunodeficiency virus type 1," <u>PNAS</u> , 90:6340-6344 (1993).	
	ME	Zhang et al., "Synthetic Zinc Finger Transcription Factor Action at an Endogenous Chromosomal Site- Activation of the Human Erythropoietin gene," <u>J. Biol. Chem.</u> , 275:33850-33860 (2000).	

PA 3202253 v1

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.